

## RF-501

## **OPERATION INSTRUCTIONS**

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

BY UNLICENSED PERSONNEL.

FEDERAL COMMUNICATION COMMISSION RULES AND REGULATIONS
PROHIBIT THE ADJUSTMENT OF THE TRANSMITTER PORTION OF THIS SYSTEM

CONGRATULATIONS on your purcahse of the RF-301 vehicle security system.

AutoPage, Inc. is one of the companies in the United States with the longest history and experience in vehicle security, and a wholly owned subsidiary of Iwata Electric Co., of Tokyo, Japan. Iwata has been an industry leader for 40 years, establishing a reputation for ingenuity in its engineering capability and innovative exommunication products. AutoPage and Iwata maintain the long tradition of providing the best value to their customers.

We sincerely hope the purchse of the RF-301 vehicle security system provides peace of mind to you.

Please take the time to read over this operation manyal to thoroughl familiarize yourself with the many features and options of the RF-301.

#### RF-501 OPERATION INSTRUCTIONS

### A. TRANSMITTER OPERATION

#### 1. ARM/DISARM

#### TO ARM THE RF-501

Press the GREEN button once to arm. The siren will chirp one (1) time, the lights will flash, and all doors will lock.

#### TO DISARM THE RF-501

Press the green button once to disarm. The siren will chirp two (2) times, the lights will flash, and all doors will unlock. If optional dome light supervision has been installed, all lighting normally connected to the vehicle's pin switches will turn on for 60 seconds. If the key is placed in the ignition and turned on before the 60 seconds has expired,

the lights will go out.

**NOTE:** Your vehicle must be equipped with power door locks and the optional relays installed with the RF-501 to allow alarm control over the vehicle door locks. Additionally, all doors will lock automatically each time the ignition key is turned on, and unlock automatically each time the ignition key is turned off. Please see SECTION (L) "IGNITION CONTROL POWER DOOR LOCK SAFETY SYSTEM".

#### 2. PANIC FUNCTION

Press and hold the GREEN button for three (3) seconds, siren will sound. Press the button again to stop the panic function.

## 3. DELETING THE PRE-WARNING SENSOR CIRCUIT (IF INSTALLED)

The RF-501 offers an option to pre-warn possible violators with siren chirps before triggering the alarm. The alarm will trigger on the third violation within 15 seconds.

To delete the pre-warning sensor, press the GREEN button again within

5 seconds after arming. The siren will confirm deletion with a low chirp.

**NOTE:** Deleted sensor(s) will return to normal operation upon disarming the RF-501. Sensor(s) deletion procedure must be followed

each time the RF-501 is armed if this function is desired. This operation deletes only the pre-warning sensor of the alarm. For maximum protection, sensor(s) may be installed on a separate alarm circuit that will not be affected by the pre-warning deletion operation.

#### 4. DELETING THE ARM/DISARM CHIRP.

The arm/disarm chirp signal may be deleted in two ways. If permanent arm/disarm chirp delete is chosen, open the access door on the RF-501

main unit and set dip switch #2 to OFF. Consult your local dealer for details.

If it is desired to control the arm/disarm chirp through the RF-501 transmitter, then the procedure outlined below must be followed.

Upon approaching the vehicle (whether armed or disarmed) push
the

BLACK button on the transmitter for a half (0.5) second, then very quickly push the GREEN button on the transmitter to arm or disarm in

the usual manner. The chirp signal will be silenced only for this particular operation. The sequence must be repeated each time if it is desired to cancel the arm/disarm chirp signal.

2. Upon deleting the arm/disarm chirp signal, arm/disarm verification may be made by watching the vehicle's lights flash.

#### TRUNK/HATCH RELEASE

To remotely release the electric trunk or hatch on the vehicle you must first disarm the RF-501. After disarming push the BLACK button on

the transmitter for **THREE (3)** seconds. Trunk or hatch will release and open. NOTE: The alarm will not control mechanical/latch trunk release mechanisms.

#### 6. SECOND/THIRD CAR OPERATION

Refer to SECTIONS "(M)" and "(N)" of this operation manual. Arming and disarming will be determined by how the transmitters have been programmed for multiple vehicle operation.

#### 7. CHANGING THE TRANSMITTER BATTERY

The RF-501 transmitter uses one (1) 12 volt miniature battery, #EL12, #VR22, or Radio Shack #23-144. It will provide approximately one year of operation before replacement is necessary.

To replace the battery, carefully remove the case screw located at the end of the transmitter where the key ring attaches to the case. Use a small blade Phillips screwdriver. Before removing the battery note the direction of its terminals. Install the new battery exactly the same using

caution so as not to bend, or otherwise damage the battery contacts.

Replace the case cover and carefully tighten the screw. DO NOT

OVER-TIGHTEN THE SCREW! Test the transmitter to insure it arms

and disarms the alarm.

#### B. LED STATUS INDICATOR OPERATION

- 1. LED OFF= The RF-501 is disarmed or in the valet mode.
- 2. LED CONSTANT ON= Indicates open trigger circuit.
- 3. LED FAST FLASHING= Passive arming timer is counting down.
- 4. LED FLASHING= The RF-501 is armed.
- LED FLASHING IN A 2 FLASH/HOLD SEQUENCE= Alarm breach

#### C. AUDIBLE AND VISUAL ALARM STATUS INDICATOR

- 1. 1 CHIRP WITH LIGHT FLASH= Alarm is armed.
- 2. 2 CHIRPS WITH LIGHT FLASH= Alarm is disarmed.
- 4 CHIRPS WITH LIGHT FLASH & LED FLASHING IN A 2
   F LASH/HOLD SEQUENCE= Alarm is disarmed and has been breached in your absence.

#### D. VALET/OVERRIDE SWITCH

**NOTE:** Both VALET and OVERRIDE functions are performed from the same switch.

#### 1. OVERRIDE FUNCTION

The OVERRIDE FUNCTION may be used if the RF-501 transmitter is lost, or broken. To operate the OVERRIDE FUNCTION, enter the vehicle (siren will sound); switch the vehicle ignition to ON. Move the VALET/OVERRIDE switch to ON; then OFF, the siren will stop. The RF-501 will be disarmed. Quickly service the alarm or transmitter to insure continued vehicle protection.

#### 2. VALET FUNCTION

- The RF-501 may be placed into the VALET (stand-by) mode to allow for vehicle service, car washing, or attendant parking without self arming after the ignition is switched off, and without leaving the RF-501 transmitter with unauthorized individuals.
- To enter the VALET mode, the vehicle ignition must be in the "ON" position; then move the VALET/OVERRIDE SWITCH to "ON".
- To return to normal operation, the vehicle ignition must be in the "ON" position; then move the VALET/OVERRIDE SWITCH to OFF.

**NOTE:** In the valet mode, the vehicle doors can be locked and unlocked using the remote transmitter. However, there will be no chirp confirmation; it is strongly recommended that the driver visually confirm that the doors are locked.

## E. PASSIVE/MANUAL ARMING OPERATION (OPTIONAL)

### 1. PASSIVE ARMING

- If you choose the PASSIVE (automatic) mode, the system must be operated as below.
- If an optional passive/manual switch has been installed, then move the switch to the ON position while the vehicle ignition is ON.
- 2. Switch OFF vehicle ignition, exit vehicle, and be sure all protected openings are closed.
- 3. The LED STATUS INDICATOR will begin FAST FLASHING and the automatic arming timer will begin counting down.
- 4. If you re-open the exit, the LED will stop flashing.
- 5. Close the exit and the LED will start flashing again.
- The RF-501 will count down for 30 seconds. After 30 seconds, the siren will chirp 1 time indicating the RF-501 has armed.

NOTE: If the optional relays have been installed to control the vehicle power door locks, the locks will automatically lock ten (10) seconds after the PASSIVE arming cycle is completed. If remote door lock/unlock is installed and automatic locking in the passive mode is not desired, then the automatic door lock in passive mode can be deleted by switching dip switch #3 in the main unit to OFF. Consult your dealer.

#### 2. MANUAL ARMING

- 1. If an optional passive/manual switch has been installed, then move the switch to the OFF position while the vehicle ignition is ON.
- 2. Switch off ignition, leave vehicle, and close all protected openings.
- 3. Press the GREEN button on the transmitter.
- 4. The siren will chirp 1 time. Five (5) seconds later the RF-501 will be

fully armed.

#### F. PASSIVE/MANUAL DISARMING OPERATION

Approach the vehicle and press the GREEN button. The siren will chirp two (2) times and the lights will flash to indicate the RF-501 is disarmed.

## G. AUTOMATIC RE-ARMING (SELECTABLE)

The RF-501 is equipped with an automatic re-arming circuit that will return the alarm to a fully armed state if a door is not opened within 60 seconds after disarming.

**NOTE:** If this feature is not desired, move dip switch #5 to OFF under the access door on the RF-501 main unit.

## H. DOMELIGHT SUPERVISION (OPTIONAL)

Each time the RF-501 is disarmed domelights will turn on for 60 seconds. Entering the vehicle after disarming, and switching on the ignition will turn the dome lights off before the 60 second time limit has expired.

NOTE: If the domelight supervision installation procedure (Section F, Page 15) is not installed as shown, then the ignition control door lock system may not work properly in your vehicle. In addition, the 60 second automatic rearm feature will not cancel by opening a door.

#### I. BREACH WARNING

The RF-501 is equipped with BREACH WARNING to tell you, upon disarming, if the alarm has been triggered in your absence. Press the GREEN button on the transmitter. If a breach has occurred, the siren will signal with 4 chirps, the lights will flash four times, and the LED will be flashing in a 2 second flash/hold sequence.

#### J. PANIC FUNCTION

The RF-501 transmitter may be used as a remote panic switch to trigger the siren in cases of emergency. To activate the PANIC FUNCTION press and hold the GREEN button on the transmitter for a minimum of 3 seconds. The siren will sound. To stop the PANIC FUNCTION press the GREEN button on the transmitter.

NOTE: PANIC FUNCTION on transmitters programmed for multiple vehicle operation will vary according to which button has been programmed for arm/disarm function on each vehicle.

#### K. TRIGGER TEST

After arming the RF-501 in either the PASSIVE or MANUAL mode, test the system in the following manner.

1. Open any door or other protected opening. The siren will sound

instantly, and the lights will flash.

2. If optional glass, shock or motion sensors have been installed, rearm the RF-501 and test according to the directions of the particular sensor installed.

If triggered in the armed condition, the RF-501 will sound its siren and flash the lights for 60 seconds; then it will stop and automatically reset and rearm. If the violation continues, the alarm will sound and lights will flash for a maximum of two 60 second cycles.

# L. IGNITION CONTROL POWER DOOR LOCK SYSTEM (SELECTABLE)

When equipped with optional relays to control the vehicle power door locks, the vehicle's doors will automatically lock when the ignition is switched on. The doors will automatically unlock when the ignition is switched off. In order to avoid any undesirable lock-out, the doors will not lock if any door is left open.

If this feature is not desired, move dip switch #4 to "OFF" under the access door on the RF-501 main unit. Consult your installing dealer for details.

NOTE: This feature will not work if your vehicle uses a vacuum operated door locking system.

#### M. PROGRAMMING THE REMOTE TRANSMITTERS.

The RF-501 includes two (2), 2 button mini transmitters which must be programmed to the alarm BEFORE any alarm function is possible, and AFTER the RF-501 has been completely installed.

NOTE: EACH TIME THE PROGRAMMING MODE IS ENTERED, ALL PROGRAMMED TRANSMITTER CODES WILL BE AUTOMATICALLY DELETED AND MUST BE RE-PROGRAMMED. This is an important

security feature. If any transmitter is lost or stolen, enter the programming mode and re-program existing transmitters.

Transmitters

can only be programmed by entering the programming mode. Existing codes will remain in memory if power to the RF-501 is disconnected.

To program the RF-501 transmitters, follow the directions as written below. IN THEIR EXACT ORDER!

- 1. Flip the VALET/OVERRIDE switch to "ON" position.
- 2. Turn the ignition switch to "ON", then "OFF", then IMMEDIATELY
- 3. Flip the VALET/OVERRIDE switch "OFF", "ON/OFF", "ON/OFF". The siren will chirp one (1) time.
- 4. Turn the ignition switch "ON/OFF", "ON/OFF". The siren will chirp two (2) times and the LED STATUS INDICATOR will begin flashing. You are now in the programming mode.
- 5. Press the GREEN button on one of the remote transmitters until the alarm siren responds with a confirming chirp. The first transmitter is now programmed.
- 6. WITHIN FIVE (5) SECONDS, press the GREEN button on the second transmitter until the alarm siren responds with a confirming chirp. The second transmitter is now programmed. NOTE: IF THE RF-501 DOES NOT RECEIVE A SECOND CODE TO LEARN WITHIN FIVE (5) SECONDS IT WILL AUTOMATICALLY CLOSE THE PROGRAMMING MODE AND RESUME NORMAL ALARM FUNCTIONS. If this happens, it will be necessary to repeat steps 1 through 6 and re-program ALL transmitters.

If three or four transmitters are programmed, continue pressing the GREEN button of the third and/or fourth transmitters.

7. The RF-501 can learn four transmitter codes. If later optional third and forth transmitters are to be programmed, follow sequence 1 through 6 and re-program ALL existing transmitters.

## N. PROGRAMMING THE REMOTE TRANSMITTER FOR SECOND & THIRD VEHICLES

The RF-501 transmitters are capable of controlling separately installed RF-501 or RF-30 alarm systems in two or three vehicles.

To code the RF-501 transmitters for two or three vehicles follow the diagrams as shown. Before multiple vehicle programming can be achieved, it is necessary to enter the programming mode as described in SECTION M.

#### 1. TWO VEHICLE OPERATION

### VEHICLE #1

Enter the programming mode on VEHICLE #1 and push the GREEN button on one of the transmitters. The alarm siren will respond with a confirming chirp. WITHIN FIVE (5) SECONDS, push the BLACK button on the transmitter for VEHICLE #2. The alarm siren will respond with a confirming chirp. Both transmitters are now programmed to VEHICLE #1.

#### VEHICLE #2

Enter the programming mode on VEHICLE #2 and push the BLACK button on the first transmitter used for VEHICLE #1. The alarm siren will respond with a confirming chirp. WITHIN FIVE (5) SECONDS, push the GREEN button on the second transmitter that had been previously programmed on VEHICLE #1. The alarm siren will respond with a confirming chirp. Both transmitters are now programmed to VEHICLE #2.

**Note:** Here, the first transmitter is assumed to be the primary transmitter of VEHICLE #1, and the second transmitter is assumed to be the primary transmitter of VEHICLE #2.

	VEHICLE #1	VEHICLE #2
TRANSMITTER #1	GREEN BUTTON	BLACK BUTTON
	GREEN BUTTON	BOTH BUTTONS
TRANSMITTER #2	BLACK BUTTON	GREEN BUTTON
	BOTH BUTTONS	GREEN BUTTON

## 2. TWO VEHICLE OPERATION WITH TRUNK RELEASE FEATURE INSTALLED

In this section the trunk release function is assumed to have been installed in VEHICLE #1 only.

- Enter the programming mode on VEHICLE #1 as described in SECTION H. Press the GREEN button on one of the transmitters. The alarm siren will respond with a confirming chirp. WITHIN FIVE (5) SECONDS, program BLACK button of VEHICLE #2 transmitter. The alarm siren will chirp for confirmation.
- Enter the programming mode on VEHICLE #2. Simultaneously press both the GREEN and BLACK buttons on the first transmitter used to program VEHICLE #1. The alarm siren will respond with a confirming chirp. WITHIN FIVE (5) SECONDS, press the GREEN button on the transmitter of the VEHICLE #2. The alarm siren will respond with a confirming chirp. Both vehicles are now programmed. The first transmitter can operate on both VEHICLE #1 and VEHICLE #2, and trunk release of VEHICLE #1.

#### 3. THREE VEHICLE OPERATION

Three vehicle operation is accomplished in the same manner as two vehicle operation. Use the chart below to program three vehicles to operate from one transmitter.

	VEHICLE #1	VEHICLE #2	VEHICLE #3
TRANSMITTER #1	GREEN BUTTON	BLACK BUTTON	BOTH BUTTONS
	GREEN BUTTON	BOTH BUTTONS	BLACK BUTTON
TRANSMITTER #2	BOTH BUTTONS	GREEN BUTTON	BLACK BUTTON
	BLACK BUTTON	GREEN BUTTON	BOTH BUTTONS
TRANSMITTER #3	BLACK BUTTON	BOTH BUTTONS	GREEN BUTTON
	BOTH BUTTONS	BLACK BUTTON	GREEN BUTTON

#### THIRD CHANNEL OPERATION

By pressing both the GREEN and the BLACK buttons simultaneously on either of the transmitters, will allow third channel operation.

This output through the LIGHT GREEN wire utilizes a 500mA negative output for control of such functions as a remote car starter.

IMPORTANT NOTE: WHILE AUTOPAGE PROVIDES THIS OUTPUT FOR POSSIBLE USE IN SUCH DEVICES AS SIGNALING A REMOTE CAR STARTER, WE CANNOT GUARANTEE THAT THE OUTPUT WILL FUNCTION AS NEEDED DUE TO THE VARYING INSTANCES WITH WHICH THIS OUTPUT MAY BE APPLIED.

#### AUTOPAGE ALARM ACCESSORIES

### AP-4000DX Paging System

Vehicle security paging was originated by AutoPage over 15 years ago. The "SHADOW" is our latest version providing a full four watts of output power to signal a handsome belt-clip paging receiver indicating your RF-501 has been triggered, even if you cannot hear the siren.

#### RS-31 Perimeter Protection Sensor

The RS-31 utilizes microwave technology that emits a protective field within the vehicle interior. The adjustable field allows the RF-501 to be armed and provide maximum protection in convertible vehicles parked with the top down, and equally good protection in enclosed vehicles. Any movement within the field will trigger the RF-501.

#### SIS-3 Glass/Shock/Motion Sensor

Our top selling and extremely reliable electronic glass/shock sensor. The SIS-3 can be finely adjusted for each installation, from sports cars to trucks. When properly adjusted, it virtually eliminated false triggers typically caused by inferior sensors.

#### MSEN-KIT

The MSEN-KIT includes two pre-wired Micro Resonance Sensors and a special triggering amplifier. These special sensors are designed to be mounted within the vehicle door or on the door post near the latching mechanism that keeps the door closed. When properly adjusted, they will respond to the frequency caused by metal-to-metal contact, such as a lock pick, screwdriver, or profession door opening tools inserted into the door for attempted illegal entry into the vehicle. the MSEN-KIT sensors are designed to provide limited coverage to specific areas. They should be used in conjunction with other AutoPage sensors for maximum protection capabilities.

### RK-1 Relay Kit

A pre-wired relay and socket for interfacing power lock systems with the RF-501, as well as the starter interrupt function. It may also be used with the AP4000DX paging system to raise and power many automatic power antennas.

ES6

As an option to the standard single tone siren package, a six tone siren is available at additional cost.

XT-501

Extra remote transmitter.

SIS-10 Air Movement Sensor

The SIS-10 super low frequency vibration sensor has successfully integrated an electret electrostatic transducer and low pass filter, creating a new and cost effective air movement sensor. If installed in a closed vehicle, any movement of air inside the vehicle which may be caused by opening a door will trigger the sensor. Applications of the SIS-10 are limitless. It will be ideal to monitor a vehicle's doors, trunk or hatch, an RV, a closed cabin on a vessel and so on. The SIS-10 can also replace glass breakage sensors. The advantage of the SIS-10 is that a single SIS-10 can cover all the doors, rear hatch, windows and sun roof even if there is no pin switch. Like other AutoPage SIS sensors, the SIS-10 has an LED and potentiometer for easy sensitivity adjustment.

#### LIMITED LIFETIME WARRANTY PROVISIONS

(U.S. and Continental U.S. Only)

- 1. AutoPage, Inc. WARRANTS that this new unit has been thoroughly inspected and tested at the factory prior to delivery. Your AutoPage equipment is guaranteed for "life" to the original purchaser/user of the equipment under the following conditions: If the product proves defective (according to AutoPage's testing) within the first year, the defective unit may be exchanged or repaired free of charge. "Proof of Purchase" (dated sales receipt) must accompany all warranty returns; **otherwise**, **your returns will be rejected and sent back.** After one (1) year, the purchaser should ship the unit pre-paid to AutoPage with a money order in the amount of \$20.00 to cover handling and shipping charges. **Note:** The WARRANTY CARD on the back of this page may be required to receive warranty services.
- This WARRANTY will be considered VOID if the equipment has been misused, neglected, improperly serviced, altered, dropped or damaged by water, contrary to the AutoPage INSTRUCTION MANUAL. Or, if used with accessories not approved by AutoPage, which may have contributed to the defect.
- 3. The purchaser's remedies under this WARRANTY shall be limited to the repair or replacement of electronic components only. **THE FOLLOWING IS NOT COVERED:** Damages or deterioration to cases, batteries, covers and cabinets; the cost of repairs, replacement and labor of which shall be borne by the purchaser even if occurring during the WARRANTY period.
- 4. Any equipment or parts which are claimed to be defective under this WARRANTY must be sent to the AutoPage Service center with "proof of purchase" at purchaser's expense prior to such return, a Return Authorization Number should be obtained. AutoPage will return the equipment, charges prepaid. Warranty Service can be provided through the dealer where the equipment is originally purchased.
- 5. Any unexpired WARRANTY shall be applicable to equipment and parts in the possession of the original purchaser only.
- 6. THIS WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7 AutoPage shall not be liable, under the foregoing WARRANTIES or otherwise, for: Any personal injury of any kind to the purchaser, its employees or agents or anyone else whomsoever resulting directly or indirectly from the use or presence of the equipment or parts; Consequential damages of any kind; Any inability of the purchaser to use the equipment.

This WARRANTY CARD is for your record. However, AutoPage reserves the right to request you to submit this WARRANTY CARD which must have complete information to receive warranty service. Please keep this card in a secured place.

## AUTOPAGE WARRANTY SERVICE CARD

Model RF-501 Serial#	
CUSTOMER TO COMPLETE	DEALER TO COMPLETE
Mr/Mrs/Ms	
Your Name (Please print)	Company Name
Address	Address
City, State, Zip	City, State, Zip
Year/Make/Model of Vehicle	Dealer's Telephone Number
	— Date of Installation\Purchase

"Proof of purchase" which includes the store name and date of purchase must accompany all warranted returns.

It is your responsibility to keep this card for any future warranty service.

## AJFORAGE ((I))),

1815 W. 205th St. #101 Torrance, CA 90501